

CORRES. CONTROL
OUTGOING LTR NO.

93 RF 4413



EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

April 8, 1993

93-RF-4413

Jennifer L. Pepe
Project Manager for OU 5
Environmental Restoration Division
DOE, RFO

JUSTIFICATION FOR THE CHANGE FROM DETECTION LIMITS TO REPORTING LIMITS ON THE
SOIL GAS SURVEY AT IHSS 115, THE OLD LANDFILL - ECM-006-93

The following is the justification for a revision to Technical Memorandum No. 4 (TM 4) to
the OU 5 RCRA Facilities Investigation/Remedial Investigation (RFI/RI) Work Plan.

Currently TM 4 lists the analytes of concern and the detection limits of the mobile
analytical facility which uses a Hewlett Packard 5890A gas chromatograph with
Photoionization Detector/Electron Capture Detector (PID/ECD). The analyte list and
detection limits for this instrumentation are listed on page 15 of TM 4, and are:

Analyte	Detection Limit (ug/L)	Reporting Limits (ug/L)
Dichloromethane	0.75	10
Benzene	1.0	1.0
1,1,1-Trichloroethane	0.25	2.0
Carbon Tetrachloride	0.10	1.0
Tetrachloroethane (PCE)	0.30	1.0
Trichloroethane (TCE)	0.25	1.0

The soil gas Detection Limits range from 0.1 to 1 microgram per liter (ug/L) (see above
table). The 0.1 to 1 ug/l detection limit is appropriate for the Environmental Protection
Agency (EPA) Level IV data, not level II data. The soil gas survey is designed to obtain
screening-level data (level II). Reporting limits (see above) of approximately 1 to 10
milligram pr liter (mg/L) will be used to determine the presence of absence of shallow,
subsurface volatile organic contamination at individual hazardous substance site (IHSS)
115. Information obtained during the soil gas survey will be used to identify locations
where subsurface soil samples will be obtained for laboratory analysis to provide EPA
Level IV data.

A revision to TM 4 is needed to decrease the possibility of reporting target compounds in
individual syringe blanks. Due to the detection limits currently listed in TM 4, traces of
dichloromethane, 1,1,1-TCA and TCE are being reported as soil gas contaminants, when in
fact they are consistently found in the syringe and equipment blanks. This modification is

ADMIN RECORD

A-DU05-000147

REVIEWED FOR CLASSIFICATION/UCNI	
BY	G. T. Ostdiek <i>GT</i>
DATE	4-12-93

DIST.	1111	1112
BENEDETTI, R.L.	X	
BENJAMIN, A.		
BERMAN, H.S.		
BRANCH, D.B.		
CARNIVAL, G.J.		
DAVIS, J.G.		
FERRERA, D.W.		
HANNI, B.J.		
HARMAN, L. K.		
HEALY, T.J.		
HEDAHL, T.		
HILBIG, J.G.		
DEKER, E.H.		
KIRBY, W.A.		
KUESTER, A.W.		
LEE, E.M.		
MANN, H.P.	X	
MARX, G.E.		
McDONALD, M.M.		
McKENNA, F.G.		
MCNTROSE, J.K.		
MORGAN, R.V.		
POTTER, G.L.		
PIZZUTO, V.M.		
RILEY, J.H.	X	
SANDLIN, N.B.		
SHEPHER, R.I.		
STEWART, D.L.		
SULLIVAN, M.T.		
SWANSON, E.B.		
WILKINSON, R.B.	X	
WILLIAMS, S. (ORC)		
WILSON, J. M.		
ZANE, J. O.		
Mast	EC	X
Bushy	WS	X
OU 5 File	X	
CORRES CONTROL	X	X
TRAFFIC		
Admin Rec.	X	

CLASSIFICATION:

UCNI	
UNCLASSIFIED	
CONFIDENTIAL	
SECRET	

AUTHORIZED CLASSIFIER
DOCUMENT SIGNATURE
REVIEW WAIVER PER
CLASSIFICATION OFFICE
DATE

IN REPLY TO RFP CC NO:

ACTION ITEM STATUS

☐ OPEN ☒ CLOSED

☐ PARTIAL

LTR APPROVAL

WSB: *WSB*
ORIG & TYPIST INITIALS

ECM/drf

RF-46469 (Rev. 9/92)

Jennifer L. Pepe
April 8, 1993
93-RF-4413
Page 2

needed to decrease the possibility of reporting false negatives. A table of syringe blank data is attached. If you have questions regarding this letter, please call me at extension 8608.



E. C. Mast
Project Manager for OU 5
ERM/Remediation Project Management
EG&G Rocky Flats, Inc.

Orig. and 1 cc - J. L. Pepe

Attachment:
As Stated

OU-5 SOIL GAS SYRINGE BLANKS
from 02/09/93 - 03/17/93

SAMPLE ID	DATE	BENZENE (ug/L)	DCM (ug/L)	1,1,1-TCA (ug/L)	CARBON TETRA-CHLORIDE (ug/L)	TCE (ug/L)	PCE (ug/L)
#3	03/17/93	ND	ND	0.0031	ND	0.059	ND
#6	03/17/93	0.045	ND	0.0220	0.00072	0.120	ND
#3	03/01/93	ND	ND	0.0038	ND	0.064	ND
#6	02/24/93	ND	ND	0.0038	0.00052	0.015	ND
#6	02/26/93	ND	ND	0.0100	ND	0.083	ND
#2	02/26/93	ND	ND	0.0470	ND	0.130	ND
#7	02/25/93	ND	0.770	0.0075	ND	ND	ND
#6	02/25/93	ND	ND	0.0140	ND	0.120	ND
#2	02/25/93	ND	ND	ND	ND	0.072	ND
#3	02/25/93	ND	ND	0.0270	0.00110	0.140	ND
#6	02/23/93	ND	ND	0.0055	ND	0.130	ND
#3	02/23/93	ND	ND	0.0022	ND	0.013	0.0082
#6	02/22/93	ND	ND	ND	ND	ND	ND
#5	02/19/93	ND	ND	ND	ND	0.052	0.0089
#10	02/19/93	ND	ND	0.0300	ND	0.086	0.0041
#7	02/19/93	ND	ND	0.0048	ND	0.056	0.0045
#10	02/17/93	ND	ND	ND	0.00200	ND	ND
#10	02/12/93	ND	ND	0.0043	ND	ND	ND
#7	02/12/93	ND	ND	ND	ND	ND	ND
#4	02/10/93	ND	4.600	ND	ND	0.090	ND
#4	02/09/93	ND	ND	ND	ND	0.200	ND
#1	02/09/93	ND	ND	0.0110	ND	0.030	ND
#6	02/09/93	ND	ND	0.0400	ND	0.200	ND
#9	02/09/93	ND	ND	0.0200	ND	0.040	ND
#8	02/09/93	ND	ND	ND	ND	0.210	ND